



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2013-0770; Directorate Identifier 2011-SW-057-AD;

Amendment 39-17771; AD 2014-04-12]

RIN 2120-AA64

Airworthiness Directives; Airbus Helicopters (Type Certificate Previously Held by Eurocopter France) (Airbus Helicopters)

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for certain Airbus Helicopters Model EC225LP helicopters. This AD adds a new operating limitation that requires increasing the minimum density altitude flight limitation for helicopters without certain Eurocopter modifications installed. This AD is prompted by a report that flights below a certain density altitude create oscillations in the main rotor which can transfer dynamic loads to the structure, the main gearbox (MGB), and the main servo-control inputs, which could result in subsequent loss of control of the helicopter.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For service information identified in this AD, contact Airbus Helicopters, Inc., 2701 N. Forum Drive, Grand Prairie, TX 75052; telephone (972) 641-0000 or (800) 232-0323; fax (972) 641-3775; or at <http://www.airbushelicopters.com/techpub>.

You may review the referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov> or in person at the Docket Operations Office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the European Aviation Safety Agency (EASA) AD, the economic evaluation, any comments received, and other information. The street address for the Docket Operations Office (phone: 800-647-5527) is U.S. Department of Transportation, Docket Operations Office, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Gary Roach, Aviation Safety Engineer, Regulations and Policy Group, Rotorcraft Directorate, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone (817) 222-5110; email gary.b.roach@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

On September 6, 2013, at 78 FR 54792, the Federal Register published our notice of proposed rulemaking (NPRM), which proposed to amend 14 CFR part 39 by adding an AD that would apply to Eurocopter France (now Airbus Helicopters) Model EC225LP helicopters, except those with certain modifications (MODs) installed. The NPRM proposed to require, within 50 hours time-in-service (TIS), amending the Rotorcraft Flight Manual (RFM) to limit minimum flight altitude to –2,000 feet density altitude. The proposed requirements were intended to prevent oscillations in the main rotor that can

transfer dynamic loads to the structure, the MGB, and the main servo-control inputs, which could result in subsequent loss of control of the helicopter.

The NPRM was prompted by AD No. 2008-0007R3, dated May 12, 2010, issued by EASA, which is the Technical Agent for the Member States of the European Union. EASA issued AD No. 2008-0007R3 to correct an unsafe condition for Model EC 225 LP helicopters that are “not equipped of all three modifications MOD 0726582, MOD 0726477, and MOD 0726583, or, if not equipped of MOD 0726592, or, if equipped with all three modifications MOD 0726606, MOD 0726610, MOD 0726611 and missing accomplishment of MOD 0726632.” EASA advises that the main rotor control linkage has a coupling between the MGB motion and the main servo-control inputs. According to EASA, in certain flight conditions with increased air density, this design generates “spurious” 14 Hertz control inputs in the main rotor, which, in return, transfer dynamic loads to the structure. These return dynamic loads give feedback to the MGB motion, inducing a continuous vibration phenomenon. EASA states that flight tests have demonstrated that below certain density altitudes, the occurrence of the vibration phenomenon is significantly increased or even diverges, which could lead to the loss of control of the helicopter. EASA advises that Eurocopter has continued to develop MODs for correcting the vibrations below certain density altitudes, and therefore, helicopters with certain MODs installed are exempt from the applicability of EASA AD No. 2008-0007R3.

To correct this unsafe condition, EASA issued AD No. 2008-0007R3, which requires revising the RFM to prohibit operation below –2,000 feet density altitude for helicopters without certain modifications installed.

Since we issued the NPRM, Eurocopter France has changed its name to Airbus Helicopters. This AD reflects that change and updates the contact information to obtain service information.

Comments

We gave the public the opportunity to participate in developing this AD, but we did not receive any comments on the NPRM (78 FR 54792, September 6, 2013).

FAA's Determination

These helicopters have been approved by the aviation authority of France and are approved for operation in the United States. Pursuant to our bilateral agreement with France, EASA, its technical representative, has notified us of the unsafe condition described in the EASA AD. We are issuing this AD because we evaluated all information provided by EASA and determined the unsafe condition exists and is likely to exist or develop on other helicopters of these same type designs and that air safety and the public interest require adopting the AD requirements as proposed, except for the name change from Eurocopter France to Airbus Helicopters. This change is consistent with the intent of the proposals in the NPRM (78 FR 54792, September 6, 2013) and will not increase the economic burden on any operator nor increase the scope of the AD.

Differences Between this AD and the EASA AD

The EASA AD specifies a compliance time of 30 days, while this AD requires compliance within 50 hours TIS.

Related Service Information

Eurocopter has issued Emergency Alert Service Bulletin No. 04A001, Revision 3, dated May 6, 2010, which specifies inserting RFM revision "Normal

Revision RN11 (10-04) or later, associated with conditional revision RCe (10-04) or later” into the RFM for helicopters equipped with screen air intakes and inserting “Normal Revision RN21 (10-05) or later, associated with conditional revision RCe (10-04) or later” into the RFM for helicopters equipped with multi-purpose air intakes. Both RFM revisions limit the minimum altitude for flight to –2,000 feet density altitude.

Costs of Compliance

We estimate that this AD will affect three helicopters of U.S. Registry and that the costs to comply with this AD by revising the RFM are negligible.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA’s authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency’s authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: “General requirements.” Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on helicopters identified in this rulemaking action.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the

national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

(1) Is not a “significant regulatory action” under Executive Order 12866;

(2) Is not a “significant rule” under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);

(3) Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction; and

(4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared an economic evaluation of the estimated costs to comply with this AD and placed it in the AD docket.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

2014-04-12 **Airbus Helicopters (Type Certificate Previously Held by Eurocopter France)**: Amendment 39-17771; Docket No. FAA-2013-0770; Directorate Identifier 2011-SW-057-AD.

(a) Applicability

This AD applies to Model EC225LP helicopters, certificated in any category, except helicopters with the following modifications (MOD) installed:

- (1) MOD 0726582, MOD 0726477, and MOD 0726583;
- (2) MOD 0726592; or
- (3) MOD 0726632.

(b) Unsafe Condition

This AD defines the unsafe condition as oscillations in the main rotor which can transfer dynamic loads to the structure, the main gearbox (MGB), and the main servo-control inputs, which could result in subsequent loss of control of the helicopter.

(c) Effective Date

This AD becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(d) Compliance

You are responsible for performing each action required by this AD within the specified compliance time unless it has already been accomplished prior to that time.

(e) Required Action

Within 50 hours time-in-service, revise the Operating Limitations section of the Eurocopter EC225LP Rotorcraft Flight Manual (RFM) by inserting a copy of this AD

into Section 2.3 of the RFM, or by making pen and ink changes as follows. Under paragraph 1, Altitude Limits, add the phrase:

The minimum altitude is limited to –2,000 feet density altitude.

(f) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Safety Management Group, FAA, may approve AMOCs for this AD. Send your proposal to: Gary Roach, Aviation Safety Engineer, Regulations and Policy Group, Rotorcraft Directorate, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone (817) 222-5110; email gary.b.roach@faa.gov.

(2) For operations conducted under a 14 CFR part 119 operating certificate or under 14 CFR part 91, subpart K, we suggest that you notify your principal inspector, or lacking a principal inspector, the manager of the local flight standards district office or certificate holding district office, before operating any aircraft complying with this AD through an AMOC.

(g) Additional Information

(1) Eurocopter Emergency Alert Service Bulletin No. 04A001, Revision 3, dated May 4, 2010, which is not incorporated by reference, contains additional information about the subject of this AD. For service information identified in this AD, contact Airbus Helicopters, Inc., 2701 N. Forum Drive, Grand Prairie, TX 75052; telephone (972) 641-0000 or (800) 232-0323; fax (972) 641-3775; or at <http://www.airbushelicopters.com/techpub>. You may review the referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137.

(2) The subject of this AD is addressed in European Aviation Safety Agency (EASA) AD No. 2008-0007R3, dated May 12, 2010. You may view the EASA AD in the AD docket on the Internet at <http://www.regulations.gov>.

(h) Subject.

Joint Aircraft Service Component (JASC) Code: 2200: Auto Flight System.

Issued in Fort Worth, Texas, on February 19, 2014.

Lance T. Gant,

Acting Directorate Manager, Rotorcraft Directorate,
Aircraft Certification Service.

[FR Doc. 2014-04314 Filed 02/28/2014 at 8:45 am; Publication Date: 03/03/2014]